

Confounded Row-Column Designs

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Abstract

Confounded row-column designs for factorial experiments are studied in this paper. The designs, thus, have factorial balance with respect to estimable main effects and interactions. John and Lewis (1983) considered generalized cyclic row-column designs for factorial experiments. However, their designs generally require each treatment to be replicated more than once. Often due to cost considerations, it is not possible to have several replications of treatments. Therefore, single replicate designs are considered in this paper when higher order interactions can be safely assumed to be zero. Fractional replications are shown to be particularly useful in such cases.

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